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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,975	01/23/2001	Stephen P. Williams	Q01-1000-US1	2314

7590 03/17/2004

Steven G Roeder
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EXAMINER

BLOUIN, MARK S

ART UNIT	PAPER NUMBER
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2653

21

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,975

Applicant(s)

WILLIAMS ET AL.

Examiner

Mark Blouin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,9-11,13 and 22-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,9-11,13 and 22-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Detailed Action

Response to Amendment

- The reply filed on February 6, 2004 was applied to the following effect: Claims 6, 9-11,13, and 22-74 remain pending in the application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 6,9-11,13, and 22-74 are rejected under 35 U.S.C. 102(b) as being anticipated by Kahn et al. (USPN 6,188,548).
3. Regarding Claims 6,9-11,13,22,37,40,50, and 59, Kahn et al. shows (Figs. 1-5) head stack assembly for a disc drive including a storage disc (inherent), the head stack assembly comprising an actuator arm , a coarse positioner that moves the actuator arm relative to the storage disk (inherent), a transducer assembly including a load beam (10), a flexure (12) secured to the load beam, a data transducer (40) secured to the flexure (12), a base plate (18) securing the transducer assembly to the actuator arm (Fig. 1), and a fine positioner (piezoelectric elements,(32,34)) secured directly to the base plate, the fine positioner moving a portion of the base plate relative to the actuator arm, wherein the base plate further comprises a positioner cavity (Fig. 5, (23)) that receives the fine positioner, the proximal and distal ends are secured

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under compression, a flex section (224,226) positioned adjacent to the positioner cavity, the flex section allowing the base plate to flex, a pair of spaced apart positioner cavities (Fig.5, (23)) that receive the fine positioner, a pair of flex sections that allow the base plate to flex, wherein the positioner cavities are positioned between the flex sections, wherein the flex sections are positioned between the positioner cavities, wherein the fine positioner moves the transducer assembly substantially transversely relative to the actuator arm, further comprising a control system (Col. 3, lns. 44-67) that directs current to the coarse positioner to move the actuator arm so that the data transducer is positioned near or on the target track and directs current to the fine positioner to selectively move the base plate so that the data transducer is positioned and maintained on the target track during rotation of the storage disk, wherein the fine positioner is a piezoelectric motor (32,34):

4. Regarding Claims 23-27,43,44,45, 53, 54, 57, and 60-64, Kahn et al. shows (Figs. 1-5) the base plate includes a pair of flex sections(224,226) that allow the base plate to flex, and wherein at least one or each of the piezoelectric motors is positioned substantially between the flex sections, and at least one of or each of the flex sections are positioned between the pair of piezoelectric motors, wherein at least one of the piezoelectric motor(s) do not contact either of the flex sections.

5. Regarding Claims 30,31,41, and 42, Kahn et al. shows (Figs. 1-5) the base plate includes a plate mount (18) that secures the base plate to the actuator arm, wherein one of the piezoelectric motors, positioned parallel to each other is secured to the base plate substantially between the plate mount and the data transducer.

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6. Regarding Claims 32,39,51,52,65,66, and 73, Kahn et al. shows (Figs. 1-5) at least one of the piezoelectric motors includes a proximal end and a distal end, and wherein only the proximal end and a distal end are the only portions of at least one of the piezoelectric motor that contact the base plate secured to the base plate under compression.

7. Regarding Claims 33,34,35,36,46-49,55,56,58, and 71, Kahn et al. shows (Figs. 1-5) the flex section (224,226) that cantilevers away from the plate side and is substantially "U" or "V" shaped.

8. Regarding Claims 67-70,72, and 74, are drawn to a method of retrieving data from a target track on a rotating storage disk of a disk drive using the aforementioned apparatus. The limitations of the method claims are met and are anticipated by Kahn et al. when the apparatus operates.

Response to Arguments

9. Applicant's arguments have been considered but are not persuasive.

The Applicant's main argument as set forth in Paper No. 20 is that the base plate of the Applicant's invention is separate and distinct from the actuator arm and, functionally, reduces shock and vibration, which reduces stress cracks in the piezoelectric crystals and increases reliability.

The Examiner maintains that the claim language "secures" does not necessarily mean separate. Also, the Examiner maintains the interpretation of Kahn's microactuated suspension as an integrate structure (load beam (10)) with distinct parts, such as base plate (18) and flexure (12). The Examiner views the Applicants invention versus Kahn as an issue of integral versus separate parts and maintains that Kahn reads on the independent Claims 6,22,37,50,59, and 67 as

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written. In addition, the Applicant suggest that the invention distinguishes from Kahn in that the functionality of the invention is unique, however, there is no such language defining the functionality of the invention in the claims to distinguish the invention from Kahn. Therefore, the rejection of Claims 6,9-11,13, and 22-74 are upheld.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimizu et al (US 6,614,627 B1) cited to show a load beam with the base plate holding piezoelectric elements and separate from the flexure.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

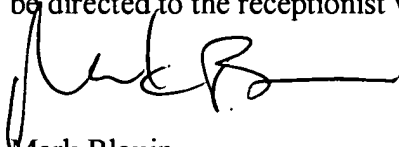
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

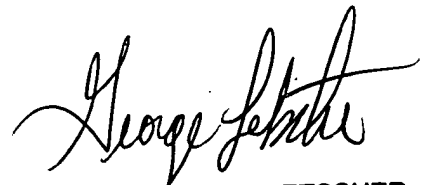
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If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin
Patent Examiner
Art Unit 2653
March 15, 2004



GEORGE J. LETSCHER
PRIMARY EXAMINER